

Date: Wed, 21 Sep 94 04:30:18 PDT  
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>  
Errors-To: Ham-Ant-Errors@UCSD.Edu  
Reply-To: Ham-Ant@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Ant Digest V94 #316  
To: Ham-Ant

Ham-Ant Digest                      Wed, 21 Sep 94                      Volume 94 : Issue    316

Today's Topics:

2m/70cm Transmitter in Camry  
2m vertical in my tree - how to?  
300 ohms TV feedline  
6meter ant?  
Antenna Rotor Wanted  
Common Mode Choke needed for 450 ohm openwire xmission line  
Diamond SX-1000 SWR Meter  
GR 1606A for sale.  
HF Loop antenna for sailboat??  
HF Mobile . . .  
Loaded tower as 160m vertical - formula needed  
Looking for tower mfg  
Needing Info about YAGI.  
SGC "QMS" mobile HF antenna  
Summary - Half Square Antenna

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>  
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 20 Sep 1994 12:28:36 -0700  
From: btree.is.brooktree.com!usenet@network.ucsd.edu  
Subject: 2m/70cm Transmitter in Camry  
To: ham-ant@ucsd.edu

Need any information on actual operating experience with a 2m/70cm  
50/35W transmitter in a Camry. Am concerned about RFI in the Camry's  
electronic circuits. Plan to keep transmitter in trunk and 40" vertical

on trunk lip mount. Have read Sept QST article. Tnx. Ted

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UUCP: ...ucsd!btree!tedm

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Date: Thu, 15 Sep 1994 15:41:00 GMT  
From: ihnp4.ucsd.edu!mvp.saic.com!news.cerf.net!ent-img.com!wb6hqm!  
bart@network.ucsd.edu  
Subject: 2m vertical in my tree - how to?  
To: ham-ant@ucsd.edu

In article <354gmu\$7t2@tequesta.gate.net>,  
Bob Bronson <optronic@gate.net> wrote:  
>The highest point of my lot is an oak tree. It is a good 20' higher than  
>my roof peak. Two reasons for considering placement in the tree are: 1)  
>homeowners assoc. prohibits antennas on roof, & in tree it will be  
>somewhat hidden. 2) it's there and higher already. Has anyone made tree  
>installations? I would interested in hearing about it. I would expect a  
>slight loss being mounted against a 5-8" dia. live tree trunk compared to  
>free air. I'm looking at something like the Cushcraft ringo ranger 2  
>vertical.  
>

Trees are pretty lossy on 146 MHz so it's usually worthwhile to try  
to keep the antenna as far away from the tree parts as possible. I  
suggest you make up a fairly low Q wire antenna such as a folded  
dipole, cage dipole or full wave loop and suspend it in the tree with  
fishing line, sinkers and other fishing hardware. It will be stealthy  
and will likely perform better than an expensive shiny commercial  
antenna. If the transmission line run is more than about 30 feet you  
should give serious consideration to using parallel feedline such as  
outdoor TV twinlead. For a given visible cross section and cost it's  
much lower loss than coax if it's run properly.

bart wb6hqm

bart@wb6hqm.ampr.org

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Date: 21 Sep 94 06:59:33 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: 300 ohms TV feedline  
To: ham-ant@ucsd.edu

Hello all,

I've just read some projects regarding J-poles antennas... These are fine, but here in Italy 300 ohms TV feedlines aren't yet sold: Modern TV receivers have a 75 ohm coax plugs, and for older ones are sold 75-to-300 ohms balun, and these are over 15 years old and b/w. So these tv are going to extinct.

My question is not where I can found (in Italy) a 300 ohm cable seller, but if I can build similar antennas using insulated wire, or brass bars or similar things.

Any suggestion will be appreciated

Mike

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--      ++++++
      + 73 de IW1CFL - Michele Debandi      +
      + IK1QLD-10 Universita' di Torino Team - NWIDG +
      + Amprnet    > iw1cfl@ik1qld-10.ampr.org      +
      + Internet   > mike@radio-gw.cisi.unito.it      +
      + Packet AX25 BBS > IW1CFL@I1YLM.IPIE.ITA.EU +
+++++
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Date: Tue, 20 Sep 1994 08:35:40 EDT  
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!usc!  
elroy.jpl.nasa.gov!lll-winken.llnl.gov!noc.near.net!saturn.caps.maine.edu!  
maine.maine.edu!jbaack31@network.ucsd.edu  
Subject: 6meter ant?  
To: ham-ant@ucsd.edu

Hello, all of you 6meter fans out there what have you found to be the best antenna for the least amount of \$\$\$. Should I spend the bucks or should I just stay with the homemade dipole?

Thanks Jason N1RWY

"RF burn is no laughing matter...unless it happens to  
your neighbors dog.."  
JBAACK@MAINE.MAINE.EDU

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Date: 21 Sep 1994 00:59:08 -0400  
From: newstf01.cr1.aol.com!newsbf01.news.aol.com!not-for-mail@uunet.uu.net  
Subject: Antenna Rotor Wanted  
To: ham-ant@ucsd.edu

I am in need of an antenna Rotor, it must be able to handle a windload of

5 sq feet, i need one soon, i will cosider all offers. Let me know via email. Thanks  
Jason

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Date: Wed, 14 Sep 1994 17:05:02 GMT  
From: ihnp4.ucsd.edu!mvp.saic.com!news.cerf.net!ent-img.com!wb6hqm!  
bart@network.ucsd.edu  
Subject: Common Mode Choke needed for 450 ohm openwire xmission line  
To: ham-ant@ucsd.edu

I recently erected an HF antenna 130 feet long averaging 25 feet above the ground fed 33 feet from one end with open wire line. It works great on 40m and on much of 80 but has severe feedline radiation towards the top of 75 which wouldn't be so bad except it creates incurable (so far) TVI and wrecks havoc with the computer. I live in an urban environment and have found the noise level on the antenna to average two S units below a roof mounted commercial multiband vertical with comparable or stronger signals and suspect if I can eliminate the vertically polarized feedline radiation the noise may even decrease more! The problem is what to do. I may be able to lengthen the long part of the antenna by making a 90 degree turn and adding 40 feet or so which should bring the feedpoint impedance up on 75 but it seems like a common mode choke on the feedline should do the trick. Since the feedline SWR is pretty high (at least 20:1) the choke would need to be capable of fairly high voltage operation. Does anyone have any suggestions?

Thanks,

bart wb6hqm

bart@wb6hqm.ampr.org

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Date: 20 Sep 1994 06:57:47 -0700  
From: btree.is.brooktree.com!usenet@network.ucsd.edu  
Subject: Diamond SX-1000 SWR Meter  
To: ham-ant@ucsd.edu

Need any information available on Diamond SX-1000 SWR meter regarding performance to specs, reliability, cost-effectiveness, etc, for 14 - 1300 Mhz mobile and portable applications. Tnx. Ted

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UUCP: ...ucsd!btree!tedm

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Date: 20 Sep 1994 08:58:06 -0400  
From: newstf01.cr1.aol.com!newsbf01.news.aol.com!not-for-mail@uunet.uu.net  
Subject: GR 1606A for sale.  
To: ham-ant@ucsd.edu

Test Equipment, etc., for SALE:

1. GR 1606-A RF Impedance Bridge-the best one for antenna work. 400 kHz-50 MHz, with copy of manual. Works. BUT-doesn't have a chassis, and it won't work without one (I tested this one in another GR1606 chassis). You need to supply the chassis and check/perform the calibration (manual sez how).

\$100 plus shipping-a deal for some minor metal work.

Scott

nx7u@aol.com  
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Date: Tue, 20 Sep 1994 06:57:18 GMT  
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!agate!howland.reston.ans.net!torn!nott!cunews!freenet.carleton.ca!FreeNet.Carleton.CA!ar445@network.ucsd.edu  
Subject: HF Loop antenna for sailboat??  
To: ham-ant@ucsd.edu

I am new with this newsgroup as well as a recently Ham (with full privileges). I have a sailboat which I plan to sail down to the Bahamas next year and will install on it my Kenwood TS450. I currently use a 20m dipole as an antenna on the boat and my transceiver has an antenna tuner. I don't seem to be able to transmit very strongly with this antenna even on 20 meters and reception of distant stations is good while local stations are usually weak.

I have looked for substantial written documentation on boat antennas but have come across texts covering mainly mobile or boat antenna solutions. I purchased the SSCA (seven Seas) book on installing an HF on a boat and again did not find many original solutions.

I was thinking of installing a small loop antenna but was wondering if anyone had experience with this type of installation. Would it work effectively on a sail boat? Should it be mounted above the mast? and how high above? or could it be mounted on a pole attached to the stern (or even to the bow)? What kind of coas would best be suited for this installation? Any other hints or solutions you might offer??

I realize that answers to similar questions may have been posted previously. If so, I would very much appreciate if someone would post them again for me - or e-mail me at ar445@freenet.carleton.ca

Thanks very much for your cooperation. I appreciate any help anyone can offer. I will endeavor to report on the efficiency of the antenna type I will install as a result of this query.

Fern Charron VA3CHA in Ottawa, Can.

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Date: 16 Sep 94 14:13:20 GMT  
From: news.cerf.net!nntp-server.caltech.edu!netline-fddi.jpl.nasa.gov!  
news.byu.edu!news.kei.com!eff!news.duke.edu!convex!cs.utexas.edu!  
howland.reston.ans.net!vixen.cso.uiuc.edu@ihnp4.ucsd.edu  
Subject: HF Mobile . . .  
To: ham-ant@ucsd.edu

jmesser@sateln.net (James Messer) writes:

>In <35a21g\$3o6@krel.iea.com> pfeuffer@comtch.iea.com (Joe Pfeuffer) writes:

>>. . . I'm looking for the company that makes a mount for an HF whip to a  
>>trailer hitch. Any help would be appreciated.

>>73

>>KW1K

>>P.S. If I can get on HF mobile -- I'll be able to drive 90 miles and put  
>>some of them "rare" Idaho and Montana counties on the air!

>Have you looked at the High Sierra 3.5-30MHz mobile 'screwdriver'  
>antennas? I'm even considering putting one up at home because of the  
>frequency range of the antenna. It's about three feet tall and has a 5-6  
>foot whip that extends above that. They advertise in CQ - let me know if  
>you need more information.

I've often thought of using a mobile antenna at home because of how well it works...but how do you dupe the conditions under which it works so well? I think you need to park a big old Caddy on the front lawn. Why is this such an effective counterpoise? If I had a motorhome parked next to my house (a socially acceptable behavior it seems), I would put the antenna on it.

Chuck Hawley, KE9UW in Urbana, Illinois  
hawley@aries.scs.uiuc.edu  
School of Chemical Sciences, Electronic Services  
University of Illinois, Urbana-Champaign

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Date: Wed, 14 Sep 1994 17:09:54 GMT  
From: ihnp4.ucsd.edu!mvp.saic.com!news.cerf.net!ent-img.com!wb6hqm!  
bart@network.ucsd.edu  
Subject: Loaded tower as 160m vertical - formula needed  
To: ham-ant@ucsd.edu

In article <352ldo\$90@nntp.hut.fi>,  
Jukka Tapio Sirvi | <jsi@vipunen.hut.fi> wrote:  
>I'm looking for a formula to calculate electrical length of a tower loaded  
>with number of yagis at different heights. The ones I've found assume all  
>beams to be at the top of the tower. In this case the tower is loaded with  
>big yagis practically from bottom to top. Any reference appreciated.  
>  
>What effects will the yagis have other than broader bandwidth and shift  
>in electrical length ? Higher efficiency ? (some antennas are at the top).  
>What else ?

Probably your best bet is to get a hold of one of the numerical antenna  
simulation software packages and model it. There are a variety of packages  
around, such as ELNEC, based on the public domain MININEC code which  
would do a fine job of not only modeling what the existing tower will do  
but the entire 160m system as well.

bart   wb6hqm

bart@wb6hqm.ampr.org

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Date: 20 Sep 94 17:57:00 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Looking for tower mfg  
To: ham-ant@ucsd.edu

I want to illuminate our riding arena and have investigated commercial  
lights and towers. Well, for the price of the towers I could buy one of  
every ham radio  
on the market. Then I remembered that back in the midwest (MI, OH) they had  
these cheap TV towers. Only problem is that they are not marketed here in  
the NW. The towers only need hold about 5 lbs of a lighting fixture on the

top, so they need not be real sturdy. I will probably put them up once and forget about them. Also, I need 6 to 8 of them.

If any hams in the midwest (or elsewhere) know of a manufacturer or distributor for cheap TV towers (20 -30 ft tall) I would appreciate their phone number or address.

Please e-mail any replies as our site does not have a news feed.

Thanks in advance.

Bill KA4GAV/7

Weyerhaeuser  
206.924.5890 Home: 206.825.1167

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Date: Mon, 19 Sep 1994 18:50:21 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!EU.net!sunic!news.funet.fi!  
nnntp.utu.fi!jusleniapolku.utu.fi!user@network.ucsd.edu  
Subject: Needing Info about YAGI.  
To: ham-ant@ucsd.edu

Hello Fellows!

Does anybody where to get \*a Macintosh software\* for planning, testing, and building YAGI antennas? My friend who is needing this prefer to find something that is free or shareware. Also, all Macintosh programs which loosely relates to the ham-radio, etc. area are needed.

Could you send me the suggestions for the FTP, Gopher, WWW sites to my address below. I prefer personal mail, since I don't follow this list actively.

Thanks!

Jouni.Santara@utu.fi

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Date: Tue, 20 Sep 1994 17:16:17 GMT  
From: world!dts@uunet.uu.net  
Subject: SGC "QMS" mobile HF antenna  
To: ham-ant@ucsd.edu



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>In article <9408167797.AA779746864@atlas.ccm ail.airtouch.com>,
>ken silverman <ken.silverman@atlas.ccm ail.airtouch.COM> wrote:
>
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>>40m Dipole @ 37'            4.99 dBd at 68 degs  
>>40m halfsquare @ 37'       6.52 dBd at 5 degs

>

>Hi Ken, I wish I had your salt water. On second thought, maybe not,  
>since that would mean CA fell into the ocean with my daughter aboard.

>

>ELNEC says a 40m half-square at 40 ft over real AZ ground has a maximum  
>gain of only 3.7 dbi (1.6 dbd) but the low-angle of radiation makes it  
>better than a resonant dipole for DX. For close in work (less than 1000 mi)  
>the dipole is better (for AZ soil).

>--

>73, Cecil, KG7BK, 00TC            Most of the doors in amateur radio can  
>(Not speaking for Intel)        not be opened by a -.-. .-- key.

>>

I wish I had gotten in on the thread earlier....I introduced a friend in  
Atlanta, Ga., to this  
type of antenna and he discovered a whole new layer of dx on 40 meters. He had  
previously been using a 40m 1/4 wave sloper. For those who want to try it,  
remember  
to connect the center conductor of the coax to the horizontal phasing wire and  
the  
shield to the vertical radiator at the corner. My buddy got them backward and  
couldn't  
get the thing to give any kind of decent swr curve. The article in CQ the last  
month or  
two did a decent job of telling how to put one up, but was pitifully thin on  
performance  
details. Here's a data point for you: during Romeo's now-invalidated operation  
to  
North Korea (I guess he was really a few miles south of Vladivostok, but who  
knows?),  
40m opened one afternoon long path to SE Asia. I have a 2 element 40m yagi at  
70  
ft. We were both hearing P5RS7 weakly thru the din, but not well enuff to work.

But, we were hearing him! The apparent problem was that he couldn't hear us.  
Bottom line: the half square is a very competitive DX antenna and will compete  
favorably with the low (50-120 ft) 40m yagis. 73, Tom WB4iUX

73, Tom WB4iUX

My posting is my view only and not AT&T's. But you know that!

DX IS !!!!!

And always will be.....

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End of Ham-Ant Digest V94 #316  
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